# HAKAN OKAY

# SOFTWARE DEVELOPER

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#### EXPERIENCE

# **Software Developer** TwinsMusic Enterprises

September 2023 - Present

Ottawa, ON

• Redesigned and redeveloped Musme Library, an online, subscription-based music library for content creators using modern web technologies, reducing page load times by 50%. Mentored the other four contributors and did code reviews.

- Implemented a new content management system to easily create, access, delete or update the platform's content and manage different aspects of the website and served it over a dashboard accessible through JWT authentication.
- Migrated to a new, secure system architecture handling how the content should be stored, accessed and downloaded using AWS S3 pre-signed URLs and JWT authentication. Used Prisma to create the data model to log/store user information.
- Integrated cloud platforms and services to create a secure, scalable platform. Used Planetscale for the MySQL database, Uploadthing for handling S3 file uploads, Vercel for deployments and hosting and GitHub Actions for CI/CD pipelines.

## **Freelance Software Developer**

June 2022 - Present

hakanokay.dev

Ottawa, ON

- Trained a machine learning model for an e-commerce business serving  $\sim$ 4700 users monthly. The model predicts the likelihood of conversion based on user actions, resulting in 15% revenue growth through personalized marketing.
- Developed a web application using Next.js, FastAPI, MySQL and Docker to manage the sale records of a local store, saving time spent on manual data entry and data management for a team of 8 people.
- Migrated a PHP web service processing external CRM data to Python. Updated the data extraction and transformation scripts, increasing efficiency by 25%. Implemented additional data validation steps using Pydantic.
- Built and managed ETL pipelines to process ∼1 billion rows of user-generated data daily, originating from 10 clients across 35 mobile applications and various backends. Used Snowflake, BigQuery and Redshift for warehousing.

#### **Software Developer**

March 2022 - February 2023

Datablast

Ottawa, ON

- Built an SQL generation engine using Jinja, Python and SQL to automate the data modelling and warehousing process for products with similar data characteristics, resulting in a 20% faster onboarding process.
- Debugged issues within the parser of a specialized SQL-like querying language designed for simpler and more efficient cloud querying. Added unit tests for bug-causing edge cases, mitigating the risk of future errors.
- Implemented new features to blast, a CLI tool enabling cross-functional teams to validate and run data transformations using SQL and Python on the same pipeline, leading to a 30% increase in development efficiency.
- Created and optimized RESTful API endpoints querying BigQuery warehouses to generate static analytics reports, improving response times by 15%, adding support for customizations, and integrating more KPIs.

#### **SKILLS**

Languages & Technologies: Python, SQL, TypeScript, JavaScript, Go, Java

Libraries & Frameworks: React, Next.js, Node.js, Spring Boot, Tailwind, FastAPI

Tools & Platforms: Linux, Git, Docker, Airflow, Prisma, GCP, AWS Databases & Warehouses: MySQL, Postgres, MongoDB, BigQuery

## **EDUCATION**

Algonquin College

September 2022 - February 2024

Ottawa, ON

Diploma in Computer Programming | Honours

December 2021 - March 2022

Certificate of Data Science and Machine Learning | Bootcamp

Izmir, Turkey

Akdeniz University

Miuul & Data Science Academy

September 2014 - September 2019 Antalya, Turkey

Bachelor of Science in Engineering